

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO**

UNITED STATES OF AMERICA,

Plaintiff,

vs.

Cr. No. 13-966 JCH

**MATTHEW CHANNON, and
BRANDI CHANNON,**

Defendants.

MEMORANDUM OPINION AND ORDER

This matter is before the Court on the Government's *Notice of Intention To Offer Expert Testimony (Jane Bales)* [Doc. 58], and the Government's *Notice of Intention To Offer Expert Testimony (Jeffrey Moon)* [Doc. 103]. Defendants filed responses in opposition to both notices [Docs. 70, 113] and the Government filed replies [Docs. 86, 115]. Having considered the pleadings, briefs, evidence, and relevant law, the Court concludes that the Government's expert testimony will be allowed; to the extent that Defendants move to exclude the testimony and request pretrial *Daubert* hearings, those requests will be denied.

BACKGROUND

Defendant Matthew Channon was indicted on a total of ten counts of wire fraud (Counts 1-10), and one count of conspiracy to commit wire fraud (Count 11). 18 U.S.C. § 1343; 18 U.S.C. § 2; 18 U.S.C. § 1349. Defendant Brandi Channon was indicted on four counts of wire fraud (Counts 7-10), and one count of conspiracy to commit wire fraud (Count 11).

Pursuant to a search warrant executed on June 28, 2011, at Defendants' residence, the Government seized two computers, along with other items. [Doc. 104-2] The Government alleges that these computers contain evidence of the offenses.

On February 3, 2014, the Government filed the *Notice of Intention To Offer Expert Testimony (Jane Bales)* [Doc. 58], stating that it may call FBI CART¹ Field Examiner Jane Bales to testify about making duplicate copies of the original images on these computers. Defendants object. [Doc. 70]

On March 13, 2014, Matthew filed *Defendant's Notice of Intent To Offer Expert Testimony*. [Doc. 91] Matthew states that he may call Tim L. Bryan to testify at trial about "the procedures and methods in the field of computer forensics, imaging of data storage devices, making duplicate copies of an original image, processing the image with forensic tools, and the verification process of images and copies." [Doc. 91, p. 2] The Government filed no opposition to this notice, and no motion to exclude Bryan's testimony.

On April 15, 2014, the Government filed the *Notice of Intention To Offer Expert Testimony (Jeffrey Moon)* [Doc. 103], stating that it may call FBI Special Agent Jeffrey Moon to testify at trial about Excel spreadsheets found on one of the computers. Defendants object. [Doc. 113]

LEGAL STANDARDS

I. Daubert and Rule 702

The admission of expert testimony is governed by Federal Rule of Evidence 702 and the Rule's interpretation by the Supreme Court in *Daubert*, *Joiner*, and *Kumho Tire*. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993); *General Elec. Co. v. Joiner*, 522 U.S. 136

¹ CART stands for "Computer Analysis Response Team."

(1997); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). Rule 702 was amended in 2000 in response to *Daubert* and *Kumho Tire*. Fed. R. Evid. 702 advisory committee's note. The 2000 amendment affirms the trial court's role as gatekeeper, excluding unreliable expert testimony.²

Id. Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

The proponent of the evidence has the burden of showing that expert evidence is admissible, by a preponderance of proof. *Daubert*, 509 U.S. at 592 n.10; *United States v. Orr*, 692 F.3d 1079, 1091 (10th Cir. 2012); Fed. R. Evid. 702 advisory committee's note to 2000 amendment. The trial court has "wide latitude" in exercising its discretion to admit or exclude expert testimony. *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1232 (10th Cir. 2004); see *Kumho*, 526 U.S. at 147 ("broad latitude" in determining how to determine reliability and in ultimate reliability determination).

The trial court "'generally must first determine whether the expert is qualified.'" *United States v. Avitia-Guillen*, 680 F.3d 1253, 1256 (10th Cir. 2012) (quoting *United States v. Nacchio*, 555 F.3d 1234, 1241 (10th Cir. 2009) (en banc)). "If the expert is sufficiently qualified, then 'the court must determine whether the expert's opinion is reliable by assessing the underlying

² Rule 702 was further amended in 2011 as part of the restyling of the Rules of Evidence, to make them more easily understood; these changes are "stylistic only" and there "is no intent to change any result in any ruling on evidence admissibility." Fed. R. Evid. 702 advisory committee's note to 2011 amendment.

reasoning and methodology.'" *Id.* (quoting *Nacchio*, 555 F.3d at 1241). Trial courts have the responsibility of ensuring that scientific testimony or evidence is both relevant and reliable. *Daubert*, 509 U.S. at 589. "Relevant evidence 'means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.'" *Bitler*, 400 F.3d at 1234 (quoting Fed. R. Evid. 401). The trial court acts as gatekeeper, making "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." *Daubert* 509 U.S. at 592-93. The gatekeeping function requires a "'sufficiently developed record'" to allow a determination of whether the trial court "'properly applied the relevant law.'" *Avitia-Guillen*, 680 F.3d at 1258 (quoting *United States v. Nichols*, 169 F.3d 1255, 1262 (10th Cir. 1999)).

Daubert sets forth a non-exclusive list of factors that may be considered, including: (1) whether the theory or technique can be, and has been, tested; (2) whether the theory has been subjected to peer review and publication; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; and (5) whether the theory is generally accepted in the relevant scientific community. *Daubert*, 509 U.S. at 593-94. The trial court need not apply all of these factors, and may consider additional relevant factors. *Avitia-Guillen*, 680 F.3d at 1258; *Kumho Tire*, 526 U.S. at 149-50.

The *Daubert* Court emphasized that the inquiry under Rule 702 is "a flexible one." *Daubert*, 509 U.S. at 594. "Its overarching subject is the scientific validity—and thus the evidentiary relevance and reliability—of the principles that underlie a proposed submission." *Id.* at 594-95. "The focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." *Id.* at 595. *Joiner* added that "conclusions and methodology are

not entirely distinct from one another." *Joiner*, 522 U.S. at 146. A court need not admit opinion evidence "that is connected to existing data only by the *ipse dixit* of the expert." *Id.* "A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *Id.*

The Federal Rules encourage the admission of expert testimony. 4 Jack B. Weinstein & Margaret A. Berger, *Weinstein's Federal Evidence* § 702.02[1] (Joseph M. McLaughlin, ed., Matthew Bender 2d ed. 2012). The *Daubert* Court recognized the "liberal thrust" of the Federal Rules and their "general approach of relaxing the traditional barriers to 'opinion' testimony." *Daubert*, 509 U.S. at 588 (internal quotation marks omitted). "The presumption under the Rules is that expert testimony is admissible." 4 Weinstein & Berger, *supra*, § 702.02[1] (footnote omitted (citing cases for "liberal admission")). "A review of the caselaw after *Daubert* shows that the rejection of expert testimony is the exception rather than the rule." Fed. R. Evid. 702 advisory committee's note to 2000 amendment. As the Advisory Committee explained, "'the trial court's role as gatekeeper is not intended to serve as a replacement for the adversary system.'" *Id.* (quoting *United States v. 14.38 Acres of Land*, 80 F.3d 1074, 1078 (5th Cir. 1996)). "As the Court in *Daubert* stated: 'Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.'" *Id.* (quoting *Daubert*, 509 U.S. at 596). These conventional devices, rather than exclusion under the restrictive and elevated standard set by *Frye*, are "the appropriate safeguards where the basis of scientific testimony meets the standards of Rule 702." *Daubert*, 509 U.S. at 596. "As the ultimate fact-finder, it is the jury that must determine, finally, where the truth in any case lies, and the district judge as gatekeeper may not usurp this function." *United States v. Frazier*, 387 F.3d 1244, 1272 (11th Cir. 2004).

II. Qualifications of Expert Witnesses

Rule 702 requires the trial court to determine whether the witness is qualified as an expert by knowledge, skill, experience, training, or education. The record must show that the trial court has performed its duty as gatekeeper; the court is not, however, required to "extensively explain" its determinations on witness qualifications. *Avitia-Guillen*, 680 F.3d at 1260; *United States v. Roach*, 582 F.3d 1192, 1207 (10th Cir. 2009) (observing that something more than conclusory statement is required). Rule 702 sets a "liberal standard" for qualifying a witness as an expert. *United States v. Gomez*, 67 F.3d 1515, 1525-26 (10th Cir. 1995); 4 Weinstein & Berger, *supra*, § 702.04[1][a]. "Rule 702 only requires that an expert possess 'knowledge, skill, experience, training, or education' sufficient to 'assist' the trier of fact, which is 'satisfied where expert testimony advances the trier of fact's understanding to any degree.'" *Robinson v. Geico Gen. Ins. Co.*, 447 F.3d 1096, 1100 (8th Cir. 2006) (emphasis added) (internal quotation marks omitted).

It is an abuse of discretion to exclude a witness as an expert if the witness is "generally qualified." 4 Weinstein & Berger, *supra*, § 702.04[1][a] n.6. A witness who "lacks expertise in specialized areas that are directly pertinent to the issues in question" is qualified "if the witness has educational and experiential qualifications in a general field related to the subject matter of the issue in question." *Id.* § 702.04[1][a]; see *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 741 (3d Cir. 1994) ("We have eschewed imposing overly rigorous requirements of expertise and have been satisfied with more generalized qualifications."). The trial court has broad discretion to determine the qualifications of a witness. *United States v. Vargas*, 471 F.3d 255, 262 (1st Cir. 2006).

"It is not required that experts be 'blue-ribbon practitioners' with optimal qualifications." *Id.* (quoting *United States v. Mahone*, 453 F.3d 68, 71 (1st Cir. 2006)). To be qualified as an

expert, a witness need not have the particular degree or training which the court believes would be the most appropriate. *See* 4 Weinstein & Berger, *supra*, § 702.04[1][a]. For example, in a toxic tort case, it was an abuse of discretion to exclude testimony on the cause of a plaintiff's physical and emotional injuries on the ground that the witness lacked a degree in medicine or chemistry; the witness was adequately qualified by her extensive research in the toxicology of PCBs. *In re Paoli R.R. Yard PCB Litig.*, 916 F.2d 829, 855 (3d Cir. 1990). A witness, however, "should have achieved a meaningful threshold of expertise" in the given area." *Levin v. Dalva Brothers, Inc.*, 459 F.3d 68, 78 (1st Cir. 2006) (quoting *Prado Alvarez v. R.J. Reynolds Tobacco Co.*, 405 F.3d 36, 40 (1st Cir. 2005)).

As indicated by the use of the disjunctive "or" in Rule 702, any one of the five bases listed in the Rule may be sufficient to qualify a witness as an expert: "knowledge, skill, experience, training, or education." *Lavespere v. Niagara Mach. & Tool Works, Inc.*, 910 F.2d 167, 176 (5th Cir. 1990), abrogated on other grounds by *Little v. Liquid Air Corp.*, 37 F.3d 1069, 1075 n.14 (5th Cir. 1994); *see* 4 Weinstein & Berger, *supra*, § 702.04[1][c]; 29 Charles Alan Wright & Victor James Gold, *Federal Practice & Procedure* § 6265 (1997 & Supp. 2012). None of the bases is essential, and none is ranked more highly than another. *United States v. Anderson*, 446 F.3d 870, 875 (8th Cir. 2006). The focus is on whether the witness has sufficient expertise to assist the jury. 4 Weinstein & Berger, *supra*, § 702.04[1][d]. This requirement is satisfied if expert testimony "advances the trier of fact's understanding to any degree." 29 Wright & Gold, *supra*, § 6265 (emphasis added). Courts find witnesses qualified as experts based on "only a relatively modest degree of specialized knowledge." *Id.*

"Gaps in an expert witness's qualifications or knowledge generally go to the weight of the witness's testimony, not its admissibility." *Robinson*, 447 F.3d at 1100 (internal quotation marks

omitted). The factual basis of an expert's opinion goes to credibility, not the admissibility of the testimony; the opposing party can challenge the opinion on cross-examination. *First Union Nat'l Bank v. Benham*, 423 F.3d 855, 862 (8th Cir. 2005).

DISCUSSION

The matters before the Court are the Government's notices to offer expert testimony at trial by Jane Bales and Jeffrey Moon. Rather than filing motions to exclude the testimony, Defendants filed responses to these notices and requested a pretrial *Daubert* hearing; however, Defendants' responses essentially constitute motions to exclude, and the Government's replies constitute arguments against exclusion. In accordance with the substance rather than the form of these pleadings, the Court will interpret the Government's notices as opposed motions to allow expert testimony. So interpreted, the Government's motions will be granted; the Court concludes at this point that the Government has carried its burden to demonstrate that the expert testimony is admissible under Rule 702 and *Daubert*.

I. No Necessity for a Separate, Pretrial *Daubert* Hearing

Defendants request a pretrial *Daubert* hearing with respect to the proposed testimony of Jeffrey Moon. [Doc. 113, pp. 2-4] The Government argues that a pretrial hearing is not required and that the Court can perform its gatekeeping function at trial. [Doc. 115, pp. 2-3] Defendants do not explicitly request such a hearing with respect to Jane Bales's testimony, but the Court is still required to ensure that it can discharge its gatekeeping function without a separate, pretrial *Daubert* hearing.

"The most common method for fulfilling [the gatekeeper function] is a *Daubert* hearing, although such a process is not specifically mandated." *United States v. Turner*, 285 F.3d 909,

913 (10th Cir. 2002) (quoting *Goebel v. Denver & Rio Grande W. R.R. Co.*, 215 F.3d 1083, 1087 (10th Cir. 2000)). "Daubert challenges, like other preliminary questions of admissibility, are governed by Fed. R. Evid. 104." *Nichols*, 169 F.3d at 1263. Rule 104 "provides that a hearing outside the presence of the jury 'shall be . . . conducted when the interests of justice require.'" *Id.* (quoting Fed. R. Evid. 104 (amended 2011, *see* Fed. R. Evid. 104 advisory committee's note (explaining that 2011 amendments are stylistic changes only without intent to change any result in any ruling))). "The requirement of the 'interests of justice' implies discretion on the part of the trial court to be reviewed only for an abuse." *Id.*

The Court is required to make "a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." *Daubert*, 509 U.S. at 592-93. The Court must also determine whether the proffered witness is qualified as an expert. The caselaw gives this Court "considerable leeway" in "deciding *how* to test an expert's reliability, and to decide whether or when special briefing or other proceedings are needed to investigate reliability." *Kumho Tire*, 526 U.S. at 152; *see Turner*, 285 F.3d at 913. "The trial court enjoys broad latitude in executing its gate-keeping function; there is no particular procedure it is required to follow." *Vargas*, 471 F.3d at 261. The Supreme Court has emphasized the importance of "considerable leeway," because broad discretion is needed to allow the Court both to avoid "unnecessary 'reliability' proceedings" and to require "appropriate proceedings" when necessary. *Kumho Tire*, 526 U.S. at 152; *see Nichols*, 169 F.3d at 1262-63; *Vargas*, 471 F.3d at 261-62.

In *Nichols*, the defendant challenged the admissibility of opinions by a forensic explosives expert about the type and size of the bomb that destroyed the Murrah building in

Oklahoma City. The defendant challenged the FBI laboratory's protocol and procedures, and also challenged the manner in which the lab work was performed; the defendant's challenges included arguments that the FBI laboratory lacked proper protocols and procedures, that the testing methodologies used were inappropriate, that unqualified persons participated in performing the test, that the equipment was not properly maintained, and that discovery information suggested the possibility of contamination. *Nichols*, 169 F.3d at 1262-63. "In sum, the defense argue[d] that the government must prove to the court, outside the presence of the jury, that appropriate scientific methods were properly applied before the test results and conclusions drawn from them can be admitted as relevant and reliable scientific evidence." *Id.* at 1262 (internal quotation marks omitted).

The district court in *Nichols* declined to hold a pretrial *Daubert* hearing and reserved ruling on admissibility until the testimony was offered at trial. *Id.* The Tenth Circuit held that the court did not abuse its discretion, because a separate, pretrial hearing is not required in order for a district court to properly fulfill its gatekeeping function. *Id.* at 1263.

The district court in *Nichols* stated that the evidence did not involve "any new scientific theory and the testing methodologies are neither new nor novel." *Id.* at 1263. The district court stated that "the contentious issue was whether the test results were undercut by flaws in the laboratory tests, a matter involving the credibility of witnesses and weighing of the evidence, both of which were more suitable for resolution by the jury." *Id.*

The district court in *Nichols* reasoned that the showing required to determine admissibility was also evidence that must be presented to the jurors to allow them to assess the weight and credibility of the expert opinion evidence. *Id.* at 1263-64. The Tenth Circuit agreed, quoting the Advisory Committee Notes to Rule 104: "'Not infrequently the same evidence which

is relevant to the issue of establishment of fulfillment of a condition precedent to admissibility is also relevant to weight or credibility" *Id.* at 1264. The district court concluded: "Because the accused has the right to have the jury hear evidence relevant to the weight and credibility of opinion evidence, the necessary foundation for admission should be presented to the jury"; and "That procedure avoids the duplication that would result from a pretrial hearing." *Id.* at 1263-64. Again the Tenth Circuit agreed, stating that the district court's "method of conserving judicial resources" was consistent with the Advisory Committee Notes to Rule 104:

[T]ime is saved by taking foundation proof in the presence of a jury. Much evidence on preliminary questions, though not relevant to jury issues, may be heard by the jury with no adverse effect. A great deal must be left to the discretion of the judge who will act as the interests of justice require.

Nichols, 169 F.3d at 1264 (quoting Fed. R. Evid. 104 advisory committee's note). The district court in *Nichols* ruled that the necessary foundation would be proved, and the district court would determine the adequacy of that showing, before the expert would be permitted to give opinions and conclusions. *Id.* at 1263. The district court also stated that if voir dire would be too prolonged or would include matters inappropriate for the jury to hear, the voir dire could be conducted outside the jury's presence. *Id.*

The Tenth Circuit stated that the district court's actions in *Nichols* were "flawless." *Id.* at 1264. The Tenth Circuit held that "*Daubert* does not mandate an evidentiary hearing," and, on appeal, the Court "simply require[s] 'a sufficiently developed record in order to allow a determination of whether the district court properly applied the relevant law.'" *Nichols*, 169 F.3d at 1262 (quoting *United States v. Call*, 129 F.3d 1402, 1405 (10th Cir. 1997)).

The Tenth Circuit observed that the procedure followed by the district court in *Nichols* was consistent with the Tenth Circuit's opinion in *Davis*. *Nichols*, 169 F.3d at 1264. In *Davis*, there was a lengthy hearing on the DNA evidence before the jury and without objection from the

defendant; the expert witness was examined, and cross-examined, about compliance with protocol before she gave her opinion. *United States v. Davis*, 40 F.3d 1069, 1075 (10th Cir. 1994). The court then overruled the defendants' objection and allowed the witness to give her opinion. *Id.* "The district court thus had the opportunity to determine whether protocol was followed before [the expert witness] testified that the samples matched [the defendants] and explained her statistical calculations." *Id.* The Tenth Circuit approved this procedure, stating that the district court in *Davis* "thus conducted the functional equivalent of a preliminary hearing." *Id.*

More recently, the Tenth Circuit again held that a separate, pretrial *Daubert* hearing is not specifically mandated. *Nacchio*, 555 F.3d at 1253-54. A party has "no entitlement to a particular method of gatekeeping by the district court." *Id.* at 1245. The Tenth Circuit stated: "Other circuits are in accord with the Tenth Circuit view." *Id.* at 1254 n.18 (citing additional cases); *see United States v. Alatorre*, 222 F.3d 1098, 1099-1104 (9th Cir. 2000).

In the case before the Court, the Government has provided a summary of Moon's qualifications and a detailed resume of Bales's qualifications. [Doc. 103, p. 3; Doc. 58-2] The Government provided sufficiently detailed descriptions of the proposed testimony. The parties have fully briefed the issues. The Court has not placed a limitation on the information upon which to base the *Daubert* decision. *Compare Dodge v. Cotter Corp.*, 328 F.3d 1212, 1223-24, 1228 (10th Cir. 2003) (holding district court has discretion to limit information, but abused discretion in severely and unreasonably limiting information), *with Nacchio*, 555 F.3d at 1250 (finding no unreasonable limitation of information).

The Court finds that there is a sufficient record for decision and that the parties have been provided ample opportunity to be heard. The Court concludes that a separate, pretrial *Daubert*

hearing is unnecessary for Moon's or Bales's testimony. The Federal Rules seek to avoid "unjustifiable expense and delay" as part of their search for truth and the just determination of proceedings. *Kumho*, 526 U.S. at 153 (quoting Fed. R. Evid. 102). But, more important, the Court finds that the foundation for admissibility under *Daubert* is the same information that must be presented to the jurors to allow them to determine the weight and credibility of the expert evidence; Defendants therefore have the right to have the jury hear this evidence. *See Nichols*, 169 F.3d at 1263-64. The evidence which would be presented at a separate, pretrial *Daubert* hearing can be presented to the jury at trial.

The Court emphasizes that the Government must lay the foundation for admissibility under *Daubert* before any expert opinions or conclusions are given at trial. *See id.* at 1263; Fed. R. Evid. 705 (court can order that expert first testify to underlying facts or data, before giving opinion). Before the jury hears any opinions or conclusions, Defendants will have an opportunity to make objections and the Court will finally determine—on the basis of the record as it then exists—whether the particular evidence is admissible. *See Nichols*, 169 F.3d at 1263; *United States v. Williams*, 506 F.3d 151, 161-62 (2d Cir. 2007) (court's performance of gatekeeping function continues until jury hears opinions and conclusions at trial).

Defendants' request for a separate, pretrial *Daubert* hearing will be denied.

II. Admissibility of Jane Bales's Testimony [Doc. 58]

Attaching a report and resume, the Government filed a notice of expert testimony by Jane Bales, FBI CART Examiner ("Computer Analysis Response Team" Examiner). [Doc. 58] The notice states that Bales is expected to testify "regarding procedures and methods in the field of computer forensics, the imaging of the data storage devices, making duplicate copies of the original image, processing the image with forensic tools, verifying the processes of imaging and

copying, providing the agents with access to an exact copy of the originals, and extracting specific portions of the exact copy for and at the request of the agents." [Doc. 58, pp. 1-2] "Specifically, she will testify that she created exact forensic images of the two Mac Mini computers that are tagged as items QAQ31_2 and QAQ37."³ [Doc. 58, p. 2]

The Government states that Bales is not expected to offer any opinion testimony and that her testimony may not constitute expert testimony. [Doc. 58, p. 1] The Court concludes, however, that the proffered testimony requires "some specialized knowledge or skill or education that is not in possession of the jurors." *United States v. Johnson*, 617 F.3d 286, 293 (4th Cir. 2010) (internal quotation marks omitted). Knowledge of computers varies widely, but the proffered testimony about creating duplicate images and data recovery is "beyond the ken of people of ordinary intelligence." *United States v. Davis*, 457 F.3d 817, 824 (8th Cir. 2006); *see United States v. Huether*, 673 F.3d 789, 797 (8th Cir. 2012) (concluding that expert testimony on comparison of file features on two computers was appropriate to assist jury); *United States v. Yu*, 411 Fed. Appx. 559, 566-67 (4th Cir. 2010) (unpublished)⁴ (concluding that process of forensic data extraction and recovery concerns expert evidence). The Court concludes that Bales's testimony constitutes expert evidence.

The Government states that Bales has almost seventeen years of experience with the FBI as a CART field examiner. Bales's detailed resume shows certifications including: Network+ Certification, Certified Forensic Computer Examiner, A+ Certification, and DOS/Windows Seizure Certification. [Doc. 58-2, p. 1; Doc. 86, p. 7; Doc. 86-2] The resume demonstrates extensive experience, including examinations in 717 cases involving 4,096 pieces of evidence and 175TB of data, and a long list of FBI computer courses. [Doc. 58-2, pp. 1-2] Bales is the

³ Although Defendants make an objection about examinations and discovery, this relates to devices returned to Defendants and devices about which Bales will not be testifying. [Doc. 70, p. 3; Doc. 86, p. 2]

⁴ The Court cites unpublished opinions for their persuasive value. *See* 10th Cir. R. 32.1(A).

Quality Manager at the New Mexico Regional Computer Forensics Laboratory (NMRCFL), responsible for ensuring compliance with the standards of the American Society of Crime Laboratory Directors and the FBI's Laboratory Division. [Doc. 86-2, p. 1] She takes annual proficiency tests.

Defendants make only cursory objections to Bales's qualifications, observing that her education is in accounting. But any one of the bases listed in Rule 702 may be sufficient to qualify a witness as an expert: "knowledge, skill, experience, training, or education." *Lavespere*, 910 F.2d at 176; see 4 Weinstein & Berger, *supra*, § 702.04[1][c]. No basis is essential. *Anderson*, 446 F.3d at 875. "It is not required that experts be 'blue-ribbon practitioners' with optimal qualifications." *Vargas*, 471 F.3d at 262 (quoting *Mahone*, 453 F.3d at 71). To be qualified as an expert, Bales need not have the particular degree or training which the Court believes would be the most appropriate. See 4 Weinstein & Berger, *supra*, § 702.04[1][a].

Similarly, Defendants speculate that Bales may lack familiarity with recommended procedures and methods, which would be demonstrated by advanced certifications. [Doc. 70, p. 12] This speculation is, at most, a suggestion of a gap in Bales's qualifications or knowledge. But "[g]aps in an expert witness's qualifications or knowledge generally go to the weight of the witness's testimony, not its admissibility." *Robinson*, 447 F.3d at 1100 (internal quotation marks omitted). Advanced certifications may indicate that an expert's testimony is entitled to greater weight, but such certification is not a prerequisite to qualification as an expert. *Pages-Ramirez v. Ramirez-Gonzales*, 605 F.3d 109, 114 (1st Cir. 2010). This issue is one that Defendants may explore on cross-examination at trial; some lack of familiarity is not a reason to refuse to qualify her as an expert. See *Benham*, 423 F.3d at 862.

Applying these principles, the Court concludes that Bales is qualified to testify as an expert on the proposed testimony. *See Gomez*, 67 F.3d at 1525-26 (stating that Rule 702 sets a "liberal standard" for expert qualification); 4 Weinstein & Berger, *supra*, § 702.04[1][a]. Although her degrees are in accounting, Bales has received extensive training and taken numerous classes on forensic computer subjects. Most important, Bales has extensive experience in this field, as demonstrated by about seventeen years of experience. *See Huether*, 673 F.3d at 797 (holding agent with ten years of specialized computer experience qualified as expert); 4 Weinstein & Berger, *supra*, § 702.04[1][a] n.6 (stating it is abuse of discretion to exclude witness who is "generally qualified"). The Court finds that Bales possesses sufficient knowledge, experience, training, and education to assist the jury. *See Robinson*, 447 F.3d at 1100. Defendants are entitled to explore at trial any perceived gaps in Bales's qualifications or knowledge.

The Government describes Bales's proposed testimony as follows:

The core of Ms. Bales's testimony will be that the relevant computer files found by the case agents during their investigation of the case were located on mirror images of the hard drives of two computers found in the Channon residence—which means that those files are also located on the hard drives of the Channons' computers themselves. The validity of Ms. Bales's testimony in this regard will be conclusively demonstrated by the fact that the hash values of the original devices and the images are exactly the same. She may also provide basic information about the pertinent files, such as location of the files and their time stamps.

In essence, Ms. Bales is a foundational witness for the introduction of the files found on the two Mac Mini computers at the Channon residence. This is her limited role in the case; her testimony will not, as Defendants contend, purport to "attribute any of the data found to the Channons."

[Doc. 86, pp. 1-2]

Bales's affidavit and the Government's reply detail the protocol and procedures she followed. [Doc. 86-2; Doc. 86, pp. 2-5] Bales created an exact image of the hard drive of each

computer using a an FBI-approved boot CD. [Doc. 86-2, p. 4] The Government states that the Linux Boot CD has been thoroughly tested by the FBI. [Doc. 86, pp. 2-3] Bales ensured that the original data would not be altered by using write-blockers. [Doc. 86-2, p. 2] The examiner can ensure that the duplicate copy is exactly the same as the original by comparing the MD5 hash values, which should match. [Doc. 86-2, p. 2] The search for relevant evidence is then conducted on the exact duplicate copy rather than on the original, in order to avoid altering the original evidence. [Doc. 86-2, p. 3] Bales placed the images onto the Case Agent Investigative Review (CAIR) for review by case agents. [Doc. 86-2, p. 4] Despite an inadvertent deletion from the oracle database, Bales ensured that the re-processed image files on the CAIR system were identical to the originals by determining that the MD5 hash values matched. [Doc. 86-2, p. 5]

With regard to the reliability of the methods used by Bales to create duplicate images of the two computers, Defendants agree with the Government that if the hash values match, the duplicate is identical to the original. [Doc. 70, p. 13; Doc. 86, pp. 8-9] Defendants thus agree with the Government that Bales's method can reliably show whether the duplicates were accurately made. This constitutes a demonstration of the reliability of Bales's methodology. *See United States v. Henderson*, 595 F.3d 1198, 1199 n.2 (10th Cir. 2010) (recognizing that identity of hash values indicates identity of files).

Discussing write-blocking and lost information, Defendants suggest that Bales appears to have violated some standard methods. [Doc. 70, pp. 13-16] To the extent that Defendants refer to the iPhone or other devices, the Court recognizes the Government's statement that Bales will not provide testimony on the iPhone or other devices—just the two computers. To the extent that Defendants make general suggestions that Bales may not have followed the procedure

Defendants suggest would be best, that is a topic for cross-examination. Defendants' arguments in this case are generally demanding a level of detailed justification that is not required for a determination of admissibility of expert evidence. The focus for the Court is not on the expert's conclusions, but on the scientific validity of the underlying methodology employed to reach those conclusions. *Daubert*, 509 U.S. at 595; *Bitler*, 400 F.3d at 1233. Once the validity of the methodology is demonstrated, other reliability issues go to the weight—not the admissibility—of the expert evidence. 29 Wright & Gold, *supra*, § 6266, at 288-89. "[I]t is inconsistent with both policy and precedent to make the admissibility of all expert testimony depend upon a showing that the expert's testimony is completely reliable in every respect." *Id.* at 290-91. Any asserted deficiencies in the protocol or procedures followed by Bales may be explored on cross-examination. See *Daubert*, 509 U.S. at 596 (stating that expert evidence may be challenged at trial through "[v]igorous cross-examination" and "presentation of contrary evidence"); *United States v. Mitchell*, 365 F.3d 215, 247 (3d Cir. 2004) (stating that reliability of expert evidence "is as much for the jury (in the context of courtroom adversary testing) as it is for the court (in the context of a *Daubert* hearing)").

Defendants further argue that a determination of admissibility cannot be made without disclosure and examination of all of Bales's "rough notes, bench notes, results of examination, [and] inventories." [Doc. 70, p. 9] The Government's reply states that the Government has now disclosed to Defendants Bales's notes regarding the two Mac Mini computers. [Doc. 86, p. 5] To the extent Defendants assert that the Court must review all of these notes before determining admissibility, the Court disagrees. The Court's role is to assess the reliability of the methodology—not to review and approve every step in the process; for the Court to do the latter

would be to usurp the jury's role of evaluating and weighing evidence. *See* 29 Wright & Gold, *supra*, § 6266.

Arguing that Bales's testimony will not be based on sufficient facts or data, Defendants make a number of general attacks about how relevance was determined, who performed verifications, criteria for interpretation—with some suggested deficiencies involving items other than the two computers. [Doc. 70, pp. 9-11] The Court concludes that Defendants' arguments involve issues that may be clarified in Bales's presentation and challenged on cross-examination; Defendants do not raise issues relevant to admissibility. At any event, the factual basis of an expert's opinion goes to credibility, not admissibility; Defendants can challenge Bales's opinions on cross-examination. *See Benham*, 423 F.3d at 862.

Defendants also assert that Bales's testimony will not assist the jury, resting this assertion on their allegation that Bales's methodology "does not meet the standards of her profession." [Doc. 70, pp. 16-17] But the question for the Court on this point is whether Bales's testimony would assist the jury in understanding things "beyond the ken of people of ordinary intelligence." *Davis*, 457 F.3d at 824. The Court finds that the average juror does need the assistance of an expert to understand the evidence at issue. Defendants' objection merely repeats their assertion that Bales did not follow the procedures and protocols Defendants think necessary—issues which may be explored on cross-examination.

The Government states that Bales may also provide "basic information" about the files, including information about recovery of deleted files. [Doc. 86, pp. 1, 4-5] The Court concludes that such testimony is within Bales's qualifications and within the realm of proper expert testimony. An expert may be used to present background information to the jury. 4 Weinstein & Berger, *supra*, § 702.02[2]. Rule 702 explicitly allows an expert witness to testify "in the form

of an opinion *or otherwise*," thus indicating that experts may do more than offer opinions. The Advisory Committee Note to Rule 702 specifically endorses use of an expert to offer background information to educate the jury:

Most of the literature assumes that experts testify only in the form of opinions. The assumption is logically unfounded. The rule accordingly recognizes that an expert on the stand may give a dissertation or exposition of scientific or other principles relevant to the case, leaving the trier of fact to apply them to the facts.

See United States v. Mulder, 273 F.3d 91, 102 (2d Cir. 2001) (expert may present background information to help jury understand issues); 29 Wright & Gold, *supra*, § 6263 & n.32 (experts may describe recognized principles, provide general background, or simply explain other evidence). The Court concludes that the "basic information" to which Bales may testify would also assist the jury to understand things outside the knowledge of the average juror. *See Davis*, 457 F.3d at 824.

Defendants argue that the Government should be required to disclose all hypotheticals that it intends to ask Bales, suggesting that there could be intrusion into the province of the jury. [Doc. 70, pp. 17-18] This general speculation does not raise questions about admissibility of Bales's testimony under *Daubert* and Rule 702. The Court concludes that Defendants' comments do not raise issues that can be productively decided pretrial; Defendants can raise such issues, if they arise, at trial.

The Court concludes that the Government has carried its burden of demonstrating, by a preponderance of the evidence, that Bales is sufficiently qualified to give the proposed testimony, that Bales's evidence is both relevant and reliable, and that such testimony will assist the jury. These conclusions are based on the information about Bales's qualifications and proposed testimony currently before the Court. The Court emphasizes that the Government must

lay the foundation for admissibility under *Daubert* before Bales gives any opinions or conclusions at trial, and further evidence on reliability might then be required. *See Nichols* 169 F.3d at 1263; Fed. R. Evid 705. Before the jury hears any opinions or conclusions, Defendants will have an opportunity to make further objections and the Court will finally determine—on the basis of the record as it then exists—whether Bales's testimony is admissible. *See Nichols*, 169 F.3d at 1263; *Williams*, 506 F.3d at 161-62 (court's performance of gatekeeping function continues until jury hears opinions and conclusions at trial).

III. Admissibility of Jeffrey Moon's Testimony [Doc. 103]

The Government filed a notice of expert testimony by Jeffrey Moon, an FBI Special Agent assigned since 2008 to a squad that investigates computer crimes. [Doc. 103, pp. 1, 3] According to the Government's statement of Moon's qualifications, Moon has a Bachelor's degree in Management Information Systems and General Business, and a Master's degree in Management Information Systems. [Doc. 103, p. 3] Before joining the FBI, Moon worked for eight years in "the information technology industry, working with websites, databases, and enterprise software"; during this time, Moon "worked with reporting software that utilized Excel's mathematical and graphing functions." [Doc. 103, p. 3] He receives regular training from the FBI on computer technology and investigative techniques related to computer and electronic crimes.

Moon is expected to testify about five similar Excel spreadsheets found on one of the computers seized from Defendants' residence, and disclosed to Defendants on March 5, 2014: 1430418.xls, 1370478.xls, 45065.xls, 141853.xls, and 45651.xls. [Doc. 103, p. 1] The Government attached two pages of one spreadsheet, and stated that Moon would explain that several columns contain commands instructing the Excel program how to generate the content of

the cells; Moon would explain each command to the jury, including Excel functions and formulas such as CONCATENATE, MOD, and INT. Moon would thus explain how 3,000 unique "bargle" email addresses are generated.

Defendants oppose presentation of Moon's testimony. First, Defendants suggest that it "is not at all clear that scientific, technical or other specialized knowledge is required to explain to the jury how the five Excel spreadsheets operate." [Doc. 113, p. 3] As the Government observes in its reply, if this subject does not constitute expert testimony, there is no issue under *Daubert* or Rule 702 for the Court to decide. [Doc. 115, p. 1] The Court, however, finds that the testimony described does constitute expert testimony. The Court agrees with the Government that an average layperson may have some familiarity with Excel, but is not familiar with the command functions of Excel and would not be capable of interpreting the computer language on which Moon would testify. *See Huether*, 673 F.3d at 797 (observing that knowledge of computers varies widely among lay jurors); *Davis*, 457 F.3d at 824 (observing that expert testimony is appropriate on issues "beyond the ken of people of ordinary intelligence"). The Government gives an example of a four-line formula that Moon would explain. [Doc. 103, p. 2] The Court finds that the average juror does need the assistance of an expert to understand such evidence.

Second, Defendants "request clarification of the extent of [Moon's] testimony" that "the spreadsheets at issue were insufficient to interact with OfficeMax's computer system," and stating that it "is unclear whether the government intends to offer testimony through this witness about the nature and difficulties of those interactions." [Doc. 113, p. 3] The Government replied that it did "not intend to have SA Moon testify on this subject beyond what was contained in its expert notice," apparently clarifying that Moon would not testify "about the nature and

difficulties of those interactions." [Doc. 115, p. 2] Given this clarification, the Court finds that Defendants' objection has been answered. To the extent that Defendants attempt to justify their request for a pretrial *Daubert* hearing, the Court finds that Defendants have not provided such justification; if Defendants still feel that there is an issue on this point, they can adequately explore it at trial through voir dire before Moon testifies to any opinions or conclusions, or through cross-examination of Moon. Defendants' vague "request for clarification" is insufficient to require a separate, pretrial *Daubert* hearing, which the Court finds would result in the "'unjustifiable expense and delay'" that the Federal Rules seek to avoid. *Kumho*, 526 U.S. at 153 (quoting Fed. R. Evid. 102).

Third, Defendants speculate that Moon may testify about the mental state of a Defendant, and argue that such testimony should not be allowed. [Doc. 113, p. 4] The Government replies that the description of Moon's testimony in its notice does not suggest that Moon would offer any testimony about such mental state or violate Federal Rule of Evidence 704(b). [Doc. 115, p. 2] The Government states that it "does not intend to ask SA Moon about the Defendants' mental states and will inform him of Rule 704(b)." [Doc. 115, p. 2] Defendants request a pretrial hearing, in order to examine "the extent of the proffered expert's testimony to ensure that it does not violate Rule 704(b)." [Doc. 113, p. 4] The Court determines that Defendants' speculation about testimony violating Rule 704(b) is adequately answered by the Government's reply that such testimony is not expected and that Moon will be advised not to give such testimony. Defendants' suggestions and unsupported speculation do not justify a separate, pretrial *Daubert* hearing.

Although the three issues raised by Defendants' response have been sufficiently addressed, and Defendants make no further specific challenge to either Moon's qualifications or

the reliability of his proposed testimony, the Court recognizes that it remains the Government's burden to show that its expert is qualified and that the expert's testimony is admissible, by a preponderance of proof. *See Daubert*, 509 U.S. at 592 n.10; *Orr*, 692 F.3d at 1091; Fed. R. Evid. 702 advisory committee's note to 2000 amendment.

Having considered Moon's education, training, and experience, the Court finds that Moon is sufficiently qualified to testify as an expert on the spreadsheets and Excel commands. The Court reaches this determination relying on: Moon's Bachelor's and Master's degrees in related fields; Moon's eight years of prior experience, particularly his work with software utilizing Excel's functions; and Moon's six years of FBI investigations into computer crimes, together with continuing training. The Court finds that Moon has ample qualifications to testify regarding Excel functions and the spreadsheets.

The Court also determines that the proposed testimony from Moon is both relevant and reliable. *See Avitia-Guillen*, 680 F.3d at 1256; *Bitler*, 400 F.3d at 1234. The Government alleges that the generation of numerous fictitious email addresses is a part of the scheme used to commit the wire fraud offenses. [Doc. 2] Testimony linking the spreadsheets found on Defendants' computers with allegedly fraudulent MaxPerks Rewards accounts is relevant and concerns facts "in issue" in this prosecution. *See* Fed. R. Evid. 401; Fed. R. Evid. 702(a).

The reliability inquiry "is a 'flexible one.'" *United States v. Baines*, 573 F.3d 979, 989 (10th Cir. 2009) (quoting *Daubert*, 509 U.S. at 594). The *Daubert* list of factors is neither exclusive nor definitive; expert testimony need not meet all of them to be deemed sufficiently reliable. *Id.*; *United States v. Medina-Copete*, 757 F.3d 1092, 1103 (10th Cir. 2014). A court need not discuss all of these factors: "A district court's gate-keeping function is more flexible than that, requiring the court to focus its attention on the specific factors implicated by the

circumstances at hand." *Storagecraft Tech. Corp. v. Kirby*, 744 F.3d 1183, 1190 (10th Cir. 2014). The "reliability criteria enunciated in *Daubert* are not to be applied woodenly in all circumstances." *Medina-Copete*, 757 F.3d at 1103 (quoting *United States v. Garza*, 566 F.3d 1194, 1199 (10th Cir. 2009)). Most of the *Daubert* factors are not relevant here. *See Baines*, 573 F.3d at 989-90 (recognizing that there is no clear line separating scientific from technical knowledge and that some *Daubert* factors are less helpful concerning technical evidence).

The Court must nevertheless determine that Moon's testimony is "based on sufficient facts or data" and is "the product of reliable principles and methods." Fed. R. Evid. 702(b), (c). It appears that Moon would explain formulas that can be used to generate the columns in the spreadsheets. [Doc. 103, p. 2] Moon's application of Excel functions to the data in the spreadsheets can easily be tested. *See Daubert*, 509 U.S. at 593-94 (listing as one factor whether technique can or has been tested).

The Court's analysis of reliability is heavily influenced by the fact that a large part of Moon's testimony appears to be presentation of background information to educate the jury. As discussed above, an expert may be used to offer such information. *See* Fed. R. Evid. 702 advisory committee's note; *Mulder*, 273 F.3d at 102; 29 Wright & Gold, *supra*, § 6263 & n.32. Background, educational information does not present all of the same concerns regarding reliability as some other types of expert testimony. Moon's testimony would explain a relatively simple computer function, and would assist the jury by explaining the spreadsheet evidence. Given the relative simplicity of such testimony, lengthy discussion is not necessary. *See Storagecraft Tech. Corp.*, 744 F.3d at 1190 (stating that less complicated challenges to uncomplicated areas require less discussion).

The Court concludes at this point that, under "Daubert's liberal definition of what constitutes reliable, scientific knowledge," Moon's testimony is admissible. *United States v. Rodriguez-Felix*, 450 F.3d 1117, 1125 (10th Cir. 2006); see 4 Weinstein & Berger, *supra*, § 702.02[1] (stating that Federal Rules encourage admission of expert testimony, and presumption is in favor of admissibility). In view of the presumption in favor of admissibility, the Court concludes that Moon's testimony is sufficiently reliable and relevant, and will assist the jury to understand the issues regarding the Excel spreadsheets and multitude of email addresses. In accordance with the approach of the Federal Rules, this testimony can be tested by the adversary process, including the opportunities to cross-examine Moon and to present competing expert testimony at trial.

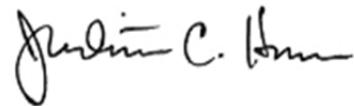
The Court's conclusion on admissibility is based on the information about Moon's qualifications and proposed testimony currently before the Court. The Court emphasizes that the Government must lay the foundation for admissibility under *Daubert* before Moon gives any opinions or conclusions at trial, and further evidence on reliability might then be required. See *Nichols* 169 F.3d at 1263; Fed. R. Evid 705. Before the jury hears any opinions or conclusions, Defendants will have an opportunity to make further objections and the Court will finally determine—on the basis of the record as it then exists—whether Moon's testimony is admissible. See *Nichols*, 169 F.3d at 1263; *Williams*, 506 F.3d at 161-62 (court's performance of gatekeeping function continues until jury hears opinions and conclusions at trial).

CONCLUSION

The Court concludes that a separate, pretrial *Daubert* hearing is unnecessary, because the Court has a sufficient record upon which to make the necessary determinations. The Court concludes at this point that the Government has carried its burden to demonstrate that the expert testimony described in its two notices [Docs. 58, 103] is admissible under *Daubert* and Rule 702, and that Bales and Moon are qualified to testify as experts with respect to the testimony described in those notices for each witness. At trial, the Government must lay a foundation for admissibility before any expert opinions or conclusions are given; Defendants have the right for the jury to hear this foundation in order to enable jurors to determine the weight and credibility of the expert evidence.

IT IS THEREFORE ORDERED that:

- (1) The Government will be allowed to present expert testimony by Jane Bales as described in the Government's *Notice of Intention To Offer Expert Testimony (Jane Bales)* [Doc. 58]; interpreting this notice and Defendants' response as the Government's opposed motion to allow such testimony, the Government's motion is **GRANTED**; and
- (2) The Government will be allowed to present expert testimony by Jeffrey Moon as described in the Government's *Notice of Intention To Offer Expert Testimony (Jeffrey Moon)* [Doc. 103]; interpreting this notice and Defendants' response as the Government's opposed motion to allow such testimony, the Government's motion is **GRANTED**.



UNITED STATES DISTRICT JUDGE